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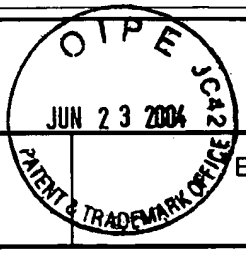
TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT (Under 37 CFR 1.97(b) or 1.97(c))	Docket No. DP-309936

In Re Application Of: **William J. LaBarge, et al.**



Serial No.	Filing Date	Examiner	Group Art Unit
10/811,131	March 26, 2004	NYA	NYA

Title: **CATALYTIC CONVERTER SYSTEM AND METHODS OF MAKING THE SAME**

Address to:
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

37 CFR 1.97(b)

1. ☒ The Information Disclosure Statement submitted herewith is being filed within three months of the filing of a national application other than a continued prosecution application under 37 CFR 1.53(d); within three months of the date of entry of the national stage as set forth in 37 CFR 1.491 in an international application; before the mailing of a first Office Action on the merits, or before the mailing of a first Office Action after the filing of a request for continued examination under 37 CFR 1.114.

37 CFR 1.97(c)

2. ☐ The Information Disclosure Statement submitted herewith is being filed after the period specified in 37 CFR 1.97(b), provided that the Information Disclosure Statement is filed before the mailing date of a Final Action under 37 CFR 1.113, a Notice of Allowance under 37 CFR 1.311, or an Action that otherwise closes prosecution in the application, and is accompanied by one of:

   ☐ the statement specified in 37 CFR 1.97(e);

   OR

   ☐ the fee set forth in 37 CFR 1.17(p).

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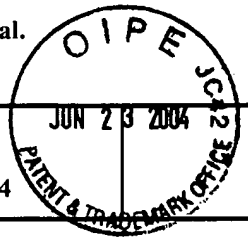

Serial No.	Filing Date	Examiner	Group Art Unit
10/811,131	March 26, 2004	NYA	NYA

CATALYTIC CONVERTER SYSTEM AND METHODS OF MAKING THE SAME

Payment of Fee

(Only complete if Applicant elects to pay the fee set forth in 37 CFR 1.17(p))

☐ A check in the amount of is attached.

☒ The Director is hereby authorized to charge and credit Deposit Account No. **06-1130** as described below.

- ☐ Charge the amount of
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I certify that this document and fee is being deposited on **June 21, 2004** with the U.S. Postal Service as first class mail under 37 C.F.R. 1.8 and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Sonia Mancini

Signature of Person Mailing Correspondence

Sonia Mancini

Typed or Printed Name of Person Mailing Certificate

***This certificate may only be used if paying by deposit account.**

Joel D. Charlton

Signature

Dated: **June 21, 2004**

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	William J. LaBarge, et al.	) Group Art Unit: NYA
Serial No.:	10/811,131	) Examiner: NYA
Filing Date:	March 26, 2004	)
For:	CATALYTIC CONVERTER SYSTEM AND METHOD OF MAKING THE SAME	)

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR §§ 1.56, 1.97 AND 1.98

Sir:

In compliance with the duty to disclose, submitted herewith is form PTO-A820 (PTO-1449) listing publication(s) of which those designated by 37 CFR § 1.56 are aware. Copies of the non-United States patents or published applications are enclosed.

The filing of this Information Disclosure Statement shall not be construed as a representation that a search has been made, or an admission that the information cited is, or is considered to be, material to patentability.

Respectfully submitted,

CANTOR COLBURN LLP

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Telephone: (860) 286-2929

INFORMATION DISCLOSURE CITATION *(Use several sheets if necessary)*		Docket Number (Optional) DP-309936	Application Number 10/811,131
		Applicant(s) William J. LaBarge, et al.	
		Filing Date March 26, 2004	Group Art Unit NYA

EXAMINER INITIAL		OTHER DOCUMENTS *(Including Author, Title, Date, Pertinent Pages, Etc.)*
	1	M. H. Kim, et al., SAE 923925 "A Study on the Flow Characteristics of the Catalytic Converter in Automotive Emission", November 20, 1992, ABSTRACT ONLY (1 page)
	2	Masao Toi, et al., SAE 978312, "The Optimization of the Catalytic Converter Internal Flow by Using 3D-CFD", October 21, 2997, ABSTRACT ONLY (1 page)
	3	Herman Weltens, et al., SAE 930780, "Optimisation of Catalytic Converter Gas Flow Distribution by CFD Prediction", March 1-5, 1993, pp 131-151
	4	Sivanandi Rajadural, SAE 2001-28-0046, "Computer Application in Converter Development from Concept to Manufacturing", pp 329-338
	5	Sivanandi Rajadural, et al., SAE 2000-01-1417, "Catalytic Converter Design, Development and Manufacturing", pp 54-60
	6	R. J. Clarkson, et al., SAE 931071, "An Integrated Computational Model for the Optimisation of Monolith Catalytic Converters", pp 11-24
	7	D.G. Lloyd-Thomas, et al., SAE 931079, "Meeting Heat Flow Challenges in Automotive Catalyst Design with CFD", March 29 - April 1, 1993, pp 93-101
	8	Achim Heibel, et al., SAE 1999-01-0768, "A New Coverter Concept Providing Improved Flow Distribution and Space Utilization", March 1-4, 1999, pp 1-10
	9	Stephen Massey, et al., SAE 2002-01-0005, "Modelling Exhaust Systems Using One-Dimensional Methods", March 4-7, 2002, 5 pages
	10	H Knon, SAE 2001-01-3806, "Close-Coupled Converter Modeling with a Thinwall Substrate for a Gasoline Engine", November 19-22, 2001, 7 pages
	11	Richard J. Matus, SAE 941082, "Modelling of Exhaust System with CFD", April 12-13, 1994, pp 1-6
	12	Joachim Braun, et al., SAE 2002-01-0065, "Three-Dimensional Simulation of the Transient Behavior of a Three-Way Catalytic Converter", March 4-7, 2002, 11 pages

EXAMINER	DATE CONSIDERED

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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*EXAMINER INITIAL		OTHER DOCUMENTS *(Including Author, Title, Date, Pertinent Pages, Etc.)*
	13	S. Park, et al., SAE 18-216-D2-161, "Simulation on the Characteristic of Gas Flow and Mixing for the Location of the Oxygen Sensor in the Exhaust System", November 19, 2001, pp 161-169
	14	S. F. Benjamin, et al., SAE 17-215-C4-379, "Modeling the Flow Distribution Through Automotive Catalytic Converters", February 2, 2001, pp 379-383
	15	S. Rajadurai, et al., SAE 990050, "Catalytic Converter Design, Development and Optimisation Using Computational Analysis and Engineering", pp 483-490
	16	N. S. Will, et al., SAE 94A035, "The Use of CFD as an Aid to Catalytic Converter Design", pp 387-397
X	17	L. S. Mukadi, et al., "Modelling the three-way catalytic converter wioth mechanistic kinetics using the Newton-Krylov method on a parallel computer", Computers and Chemical Engineering 26 (2002), pp 439-455, October 18, 2001
	18	Soo-Jin Jeong, et al., "Simulation of Thermal and Flow Characteristics for Optimum Design of an Automotive Catalytic Converter", Chem. Eng. Comm., 189: 1314-1339, 2002, June 28, 2000
	19	T. Shamim, et al., "A Comprehensive Model to Predict Three-Way Catalytic Converter Performance", Journal of Engineering for Gas Turbines and Power, April 2002, Vol. 124, pp 421-428
	20	Soo-Jin Jeong, et al., "An Application of CFD to Improve Warm-up Performance of the 3-way Auto-Catalyst by High Surface Area and Low Thermal Mass", Int. J. of Vehicle Design, Vol. 29, No. 3, 2002, pp 243-268
	21	Dimitrios N. Tsinoglou, et al., "Oxygen Storage Modeling in Three-Way Catalytic Converters", Ind. Eng. Chem. Res. 2002, 41, pp 1152-1165, Published 01/30/2002
	22	Sandip Mazumder, et al., "Sub-Grid Scale Modeling of Heterogeneous Chemical Reactions and Transport in Full-Scale Catalytic Converters", Combustion and Flame 131:85-97 (2002)
	23	Benlin Liu, et al., "Experimental Study of a Reverse Flow Catalytic Converter for a Dual Fuel Engine", The Canadian Journal of Chemical Engineering, Volume 79, August 2001, pp 491-506
	24	V. Yakhnin, et al., "Stationary and Traveling Hot Sports in the Catalytic Combustion of Hydrogen in Monoliths", Chemical Engineering Science 57 (2002) pp 4559-4567

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*EXAMINER INITIAL		OTHER DOCUMENTS *(Including Author, Title, Date, Pertinent Pages, Etc.)*
	25	S-J. Jeong, et al., "A Three-Dimensional Numerical Study of the Effect of Pulsating Flow on Conversion Efficiency Inside a Catalytic Converter", Proc. Instn Mech Engrs, Vol. 215, Part D, pp 45-61

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